

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004457**Date Inspected:** 28-Oct-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	N/A	CWI Present:	Yes	No
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use: Yes No N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed: Yes No N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up: Yes No N/A
Approved Drawings:	Yes	No	N/A	Approved WPS: Yes No N/A
				Delayed / Cancelled: Yes No N/A
Bridge No:	34-0006	Component:	OBG & Tower	

Summary of Items Observed:

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

OBG Sub-Assembly Bay 4:

The QA Inspector randomly observed ZPMC Non-Destructive Testing (NDT) Technician Cai Xin Xin, utilizing the Magnetic Particle Testing (MT) Method to perform a final MT examination of the cover pass of all the welds on Side Plate Sub-Assembly SP724-00 WJ's 001 through 012 and Bottom Plate Sub-Assembly BP116-001 WJ's 001 through 012. There appeared to be no indications and ZPMC QC accepted all the above listed welds.

The QA Inspector performed a 10% final Visual (VT) and MT verification on the cover pass of all the welds on Side Plate Sub-Assembly SP724-00 WJ's 001 through 012 (Green Tag 001240) and Bottom Plate Sub-Assembly BP116-001 WJ's 001 through 012 (Green Tag 001241). There appeared to be no indications the QA Inspector accepted all of the above listed welds. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC NDT Technician Cai Xin Xin, utilizing the MT Method to perform a final MT examination of the cover pass of all the welds on 9M Diaphragm. ZPMC QC accepted all welds. The piece was then marked up by ZPMC for grinding on almost every weld, and The QA Inspector randomly observed ZPMC welding personnel grinding on the marked up areas on the 9M Diaphragm. ZPMC QC could not explain why this was done. The final QC MT as well as the final QC VT, will have to be performed again after the rework is completed.

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ZPMC requested that the QA Inspector perform a final VT and MT on 33M (N) Double Diaphragm. The QA Inspector observed that the part was not ready. The part was covered with grinding dust, rust, and caked on UT Couplant. ZPMC Representative Jiang Jiadi ZPMC directed welding personnel to clean the part and a ZPMC helper proceeded to try to clean the rust and caked on UT Couplant with a 7 inch angle grinder and a 1/4 inch hard disc. The QA Inspector informed Mr. Jiadi that the welds did not need grinding, but just needed to be wire brushed. Mr. Jiadi was reluctant to change from the hard disc to a wire brush and informed the QA Inspector that the part had already been cleaned prior to final inspection by ZPMC QC and shouldn't have to be cleaned again and that the QA Inspector should inspect it as is. The QA Inspector informed Mr. Jiang that the cleanliness of the part had deteriorated since ZPMC had performed their QC Inspections and that the part could not be inspected by the QA Inspector until it was cleaned again. ABF QC Personnel informed the QA Inspector and Mr. Jiadi that the part did indeed have to be cleaned again before the QA Inspector could perform his final VT and MT. Mr. Jiadi then informed the QA Inspector that the part would be cleaned and be ready for QA final VT and MT verification by 14:30 this afternoon.



Summary of Conversations:

There were no relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Josh Ishibashi 13764716411, who represents the Office of Structural Materials for your project.

Inspected By: Franco,Charlie

Quality Assurance Inspector

Reviewed By: Wright,Mark

QA Reviewer